The Logger's BARK

1916 - Radio Club of Tacoma - 2016

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Your Radio Club's 2016 Salmon Run Results

Randy WB4SPB reports these stats from W7DK's 2016 Salmon Run efforts:

W7DK swept all 39 counties and worked all 49 states other than WA, 6 of 8 Canadian provinces (missed SK and NT) and 15 DX countries (total 109 multipliers).

1212 QSOs for 2808 QSO points (average ~2.32 points per QSO)

The W7DX Bonus station was worked on two modes for 1000 bonus points.

Claimed score: 307072

This year W7DK did much better than 2015 claimed score of 209041 due to increased Qs (up ~200), increased number of multipliers (up 16) and higher percentage of CW QSOs in the mix (~32% vs ~25%)

Top operator this year: Phil K7PIA with 549 Qs (45% of total)

QSOs per Operator:	
K7PIA	549
WB4SPB	201
K7ZG	159
K7OG	81
W7MKE	66
WG7X	64
N7OMS	35
AF7YD	33
K7TMW	17
W7XTZ	5
W7MWF	2

QSOs per Band	
15M CW	26
15M SSB	2
20M CW	197
20M SSB	676
40M CW	88
40M SSB	70
80M CW	73
80M SSB	80

QSOs per Mode	
SSB	828
CW	384

UpComing Notable Club Activities

9/28, Weds 7:00 PM Clubhouse Activity Night
10/ every weekend: W7DK/100 On the Airwaves
10/5, Weds, 7:00 PM Club Officers Board Meeting
10/8-9, Sat 9:00 AM New Tech Class at Clubhouse
See w7dk.org for more details….
10/11, Tues, 7:00 PM, VE Testing at Clubhouse
10/12, Weds, 7:30 PM– Club Meeting. See w7dk.org
10/26, Weds, 7:00 PM Clubhouse Activity Night

Dang! Unfortunately– no photos were taken at the clubhouse Salmon Run event.

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Did You Know?

Every weekend in October RCT will operate W7DK/100 to celebrate our club's 100 year anniversary. Details will be revealed later– to let you know how you can participate.

Great Caesar's Ghost

by Rich KR7W - Bark Editor

Due to many commitments, not enough time and the fall season need to rest more… this issue of the club's newsletter will be a **Bark Light** version.

Some members have asked me how the Contesting Queen Bee Betty and her boys Andy, Ken and Ed did in the Salmon Run radio sport contest. Did they get the coveted "Clean Sweep"?

The final part of their story will come later after I interview them in more detail. However, I can reveal that they missed 4 of the 39 counties. It would have been only three counties missed if at least one member of their team could operate the **Morse Code** mode**.**

It turns out that on Sunday morning on 80 Meter SSB- the ham in the rare county that Ken was trying to work– had a high noise level and couldn't quite make out Ken's exchange info. The rare county ham (which Ken could hear well) asked Ken if he could switch to CW and send his info. Gulp! Ken had to say, "Sorry, No can do". Betty's crew learned from listening to the two 80 Meter SSB 'watering hole' frequencies that that CW Guy's county was the most wanted by all of the hams who hung out there. Contest Fever stricken Betty wasn't too pleased, to say the least.

Regarding the Image above- A cut n paste from the big banner at the Radio Club booth in the Hobby Hall at the Puyallup WA State Fair. More photos of the Fair Booth in this issue— A big Ezra Hat Tip and bigger thanks to- Stephen AD7AB.

Thanks! From Ezra Meeker

Hamshack of the Month

by Contributing Members

Gentle Bark readers… no matter how big or little your operation is– please share your shack– home station or mobile ops for others to view and learn from.

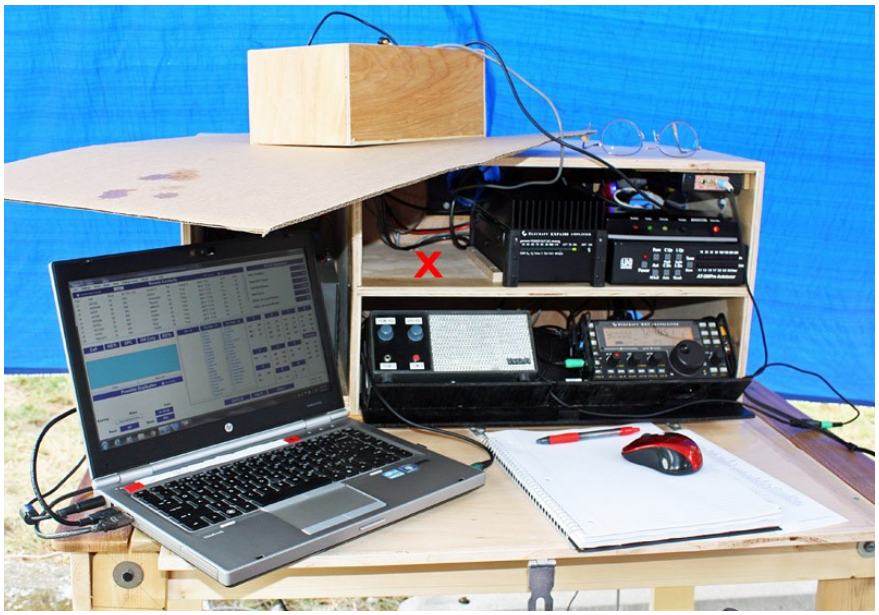
I'll admit… I am desperate for contributions… so the rules have changed. I will accept a 'shack O the Month' from a non-member.

599kr7w@gmail.com [LINK]

Photos must be at least 200 dpi for editing purposes. Thanks,
Rich KR7W

HAMSHACK OF THE MONTH

BY CONTRIBUTING MEMBERS



Note: Pre Coleman Candle Lantern on top of desk

WW7LW's Ferry County 2016 Salmon Run station

Top shelf: **X** drawer that contains telegraph keys, hand mic, flashlight. KX3 100W amplifier, LDG-200W Auto Tuner, Arduino Winkeyer, PC to Radio audio interface. The piece of cardboard was originally a PC sun shade– here it does umbrella duty to keep rain out of the PC keyboard.

Bottom Shelf: Homebrew Speaker + Headphone Amplifier, Elecraft KX3 Transceiver– the equipment sits on a shelf that slides into the box so the lid can close. 30 Amp Power Supply is behind laptop screen. This station fits into a box that is modeled after a Civil War Officers Field Desk (Upper R image). The WW7LW Field Desk sits on a table that folds to 3 inches thick (Lower R image).

Lower L image: Chuck AC7QN searches for needed counties on 80 Meter SSB.

This stations antenna was a 80-40-20 Meter Fan Dipole at 25 ft at the apex.

The AC Power Plant was a Honda EU1000 Generator that used about 1 gallon of fuel for 15 hours of operation.

Send the Bark a photo of your station for 300 KB of fame. 599kr7w@gmail.com Click It!

AROUND THE CLUBHOUSE
PAST, PRESENT & FUTURE INFO

At the Clubhouse a few Saturdays ago… I was chatting with some attendees and was surprised to learn that these hams didn't know about our clubs Lending Library.

Yah, it's sorta out of the way – in the back of the Classroom– so it may be easy to miss– but none the less… it's a quite a nice collection of ham radio reading.

Most of the books are purchased from the Club Library's budget. Some are from donated directly by members and others from random donations.

There's quite a selection: Ham Radio Fiction: Carl and Jerry stories from Pop 'Tronics mags of the 50s and 60s, Cynthia Wall KA7ITT stories– my favorite, "Night Signals". There's basic Radio and Electronic theory as it relates to ham radio; QRP books; Emergency Services; Radio and Antenna handbooks; repeater books; digital communications; and Arduino Projects for ham radio.

These books are for members to check out (unlike the books in the Second Floor Library area) and take home. There is an Honor System 'check out' clipboard on the wall.

Club elections are coming up…. Prez Gary's term is up as well as two Board Member positions. The nominating committee has presented these club members who are running for:

Prez: Dave W7UUU (unopposed)

Treasurer: Steve AF7YD (unopposed)

Board Members (2 positions to fill):
Red WB7EC
Adam W2NCC
Phil K7PIA

So, club members– If you want to be a club officer– there's still time for you to be on the ballot. Here's how to not miss out:

At the October club meeting (first Weds at the Library Service Center) have the person sitting next to you to nominate you for the position you want to fill. For Prez and Treasurer– you must have two years of seniority as a club member; and to be a Board Member position– you must have one year seniority as a club member. All of the election details well stated in the Club Bylaws– accessed via www.w7dk.org. You must log on as a member to see it.

The Election Committee will USPS mail you a 'secret ballot' on or before Oct 20 and you must return is in time for the committee to tally up the winners at the November (first Weds) club meeting.

Around the Clubhouse

Past, Present & Future Info

A new table with a PC on it was donated by George K7GRS to be the Clubhouse Library Reference area. Check it out on the 2nd Floor landing.

Patches (iron-on) developed and manufactured by Mike W7MKE are available for a $2 donation in the Clubhouse Classroom.

Handyman Steve, AF7YD is making huge progress on the restoration of the south side of the clubhouse garage.

Steve has replaced all of the dry-rotted support members, installed a wooden sill all the way across (above the doors) and had a sheet metal cover fabricated for it. It looks like Steve is on the restoration home stretch.

There's been no word when the painting party will begin.

Stay tuned.

KR7W

First Day of Fall:

Each year our radio club has an exhibit at the Puyallup Fair (now the WA State Fair) in the Hobby Hall. Stephen AD7AB sets up and manages this very attractive exhibit which includes a two radios donated by Icom of America – a IC-7300 Software Defined HF transceiver and a IC-5100 VHF/UHF transceiver. The Fair folks allows our club to install a multi-band HF dipole and a VHF/UHF mono-pole antenna on the Hobby Hall roof.

One goal of the exhibit is to get folks interested in becoming a ham for the first time or for former hams to re-license. Info on Stephen's New Tech classes at RCT is provided to prospective new hams. Thanks Stephen for setting this up great exhibit each year. And some more thanks to the many volunteers who 'man the booth' to spread the ham radio message as well as promoting The Radio Club of Tacoma.

IC-5100 (on left) and IC-7300 SDR HF Transceiver in middle. PS-126 power supply on right. Kudos to Icom for loaning RCT the very nice equipment.

Radio Club of Tacoma
Board of Directors Meeting Agenda
August 3, 2016

Meeting called to order at 7:00 pm by Vice President Mike W7XTZ.

Officers and Directors Present
Vice President Mike Mikuchonis W7XTZ
Secretary Mike Finnie W7MWF
Board Alan Ferguson N7OMS
Board Bruce Hanson WE7P

Quorum? A quorum of five was not reached and it was determined no official business would be transacted. There were 12 names on the sign in sheet.

Silent Key or Illness? Condolences to Bob KE7WPK on the loss of Pat, his XYL of 66 years.
It was noted that Albert N7AEB had recently fallen and was hospitalized for observation. It has since been reported that he has been released and was able to visit the clubhouse on Saturday Aug 6.

Approval of Minutes from July 6, 2016 Board Meeting was not accomplished due to lack of a quorum

Secretary's Report Mike W7MWF reported recent correspondence included utility and Field Day bills, subscriptions, bank statements, and QSL cards from the bureau

Treasurer's Report The Treasurer's reports were distributed by Mike W7XTZ

Committee / Reports

Membership George K7GRS reported current membership stands at 288

Training The next Technician Class will be held October 8/9, 2016

Info Tech Randy WB4SPB reported all systems nominal and that the NAS server software has been upgraded. Also, Randy reported that the order for the NEC4 Antenna Modeling Software has been submitted.

Library George K7GRS reported that scanning the barcodes of all the library holdings has been completed. Also, he requested that the library table upstairs not be used as a general dumping ground for miscellaneous paraphernalia.

HF Operations No Report

Repeater Ops No Report

Facilities Mgmt Bruce WE7P reported that garage repairs are ongoing thanks to Steve AF7YD

Property Mgmt Mike W7MWF distributed a property disposition request. Several items were

identified as being suitable for use in the HF room, by the repeater committee, and as possible loaner equipment.

Museum No Report

Weds Activity Nite Open house get on the air night. Try out some of the newly added rigs. It was noted that the ad hoc activity planning committee could use some input developing presenters and topics.

General Mtg TBD. Dave W7UUU will be out of town for the August 10 meeting. We will likely have a video presentation courtesy of Leonard KA7NWF

Unfinished Business

Centennial Planning Mike W7MKE and Red WB7EC presented their samples of W7DK Centennial Patches and solicited input regarding popularity of the different styles. John AC7WW advised that he has designed and order Centennial Pins that will be made available for sale to club members. The consensus was that it would be appropriate to have general similarities in appearance between the patches and the pins. John, Mike and Red were heartily thanked for their efforts and leadership initiatives.

Tower Inspection Awaiting formal report and invoice from inspector

Alarm system No more reports of false alarms have occurred. The situation will continue to be monitored to attempt to identify the cause of the intermittent problem.

New Business

Other New Business Mike W7MWF reported that the club has an opportunity to acquire property from the Washington State Surplus Property Division. He was encouraged to pursue this possible source of equipment.

Activity Reports and Discussion Topics

Start Salmon Run Planning George K7GRS is again willing to take the lead on the Fund Raising Pledge Drive. Thanks George, and others who are offering to help him out. Operational logistics and equipment status will be reported at the next Board meeting.

Remote Station Adam W2NCC brought up the idea of developing a remote access station. Some of the issues, pros, and cons were discussed. Adam was encouraged to develop and submit an outline of the various options, as well as what would be needed and what could be accomplished.

Youth in Ham Radio Steve AF7YD made several suggestions regarding incorporating Amateur Radio into schools as a teaching tool. He is going to touch base with Mike W7XH who ramrodded the Kids Day event last year.

Adjournment There was no official adjournment but the meeting broke up at about 8 pm.

Radio Club of Tacoma
General Membership Meeting Notes
August 10, 2016

Meeting called to order at 7:30 p.m. by Vice President Mike W7XTZ at the Pierce County Library Administration Building.

Officers and Directors Present
Vice President Mike Mikuchonis W7XTZ
Secretary Mike W7MWF was absent and had requested Randy WB4SPB to take notes. Thanks Randy!

Meeting notes:

Meeting called to order at 7:30pm by W7XTZ (counted 27 in the room, one or two more may have entered later).

Pledge led by W7XTZ.

Guests: none

New calls: none

Health and welfare: Pat Jamison's passing was noted once again, Albert Bacon (N7AEB) is up and around after his recent fall.

Secretary's report: in the absence of contrary evidence, we supposed the usual not-unusual stuff had arrived in the mail

Treasurer's report: none, Ray KE7BZD passed the FD Pig.

Membership (K7GRS): nothing new

Library (K7GRS): George related that re-organization of the Library has been completed. He invited everyone to use new Library catalog search and location features now available on the W7DK website (http://w7dk.org/index.php?option=com_content&view=article&id=111&catid=104&Itemid=154, login required).

VE report (AC7WW): in the most recent session, 3 candidates appeared, 2 were successful. Next session 9/3.

Centennial pins (AC7WW): John is very happy with the company he's been working with -- the pins will arrive this week, ahead of schedule. Each member is entitled to one free pin, additional pins available for $2 each. John plans to hand them out at meetings, on Saturdays, at the Centennial banquet, and via postal mail if necessary (shipping charges may apply).

Centennial patches (K7MKE): Mike (and Red WB7EC) are still collecting member input before choosing one of the candidate designs. The patches will be donated to the Club for distribution as the Club sees fit.

HF ops: nada

Facilities: nada

Property mgmt: nada

Museum: nada

Library: (with membership, see above)

4WAN (WB4SPB): 2 weeks from tonight, "a get on the air evening" with a possible nod to the upcoming Salmon Run activity, watch the website and your inbox for details.

Salmon Run (K7GRS): a letter will arrive around the end of August

Show & Tell: nada

Tuning and traffic: Dave N7HT is hoping to teach a General License Class at the Clubhouse this fall. Additionally, he recommends a visit to the "Spark Museum of Electrical Invention" in Bellingham (sparkmuseum.org).

Program (KA7NWF): video - the *original "Ham's Wide World" that first aired in 1959 on ABC TV*

Door prize won by Al Churchill AC7BU

Raffle prize won by Red WB7EC

- Adjourned at 8:31pm

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—Bark Editor

HINTS AND KINKS
CONSTRUCTION & INSTRUCTION
BY READER SUBMISSION

THINKING ABOUT POWER SUPPLIES FOR HAM RADIO USE BY: FORMER N7EOB

When preparing the WW7LW station for Expedition operations in the Salmon Run (WA QSO Party) contest— a 1.2 volt loss between the 13.8 VDC power supply output terminals and the DC volts the radio display indicated– with the transmitter at full power output (95 watts)- was discovered.

How could this be? Where's the voltage going? The DC jumper cable is only 2 feet long and is #10 AWG wire size. There shouldn't be THAT much voltage drop.

A 3" 12V heat sucking fan hacked into top of the PS case, carry handle added for much easier hoisting, and Rig Runner Fuse Panel added. Note X1 is a set of Fuse Holders and X2 is the cable that feed the 100 Watt transmitter with the 1 Volt drop problem. These connect directly to the 13V output terminals.

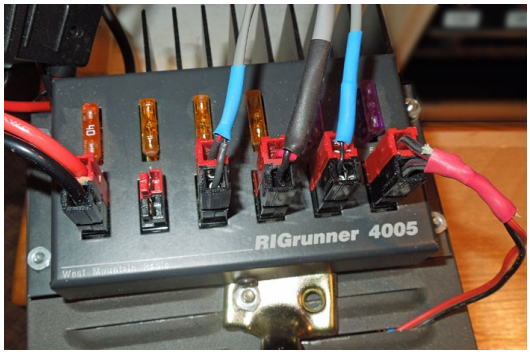
Short History: For many years I've owned only one 13.8 power supply– the Icom PS-125 that came with my IC-756 Pro 2 radio package purchase. Thinking I needed another– I bought a used Triplite (big name in commercial communications) model PR-30. When using this PS– It buzzed loudly and emitted a lot of heat with no load. Investigating revealed that this PS uses a Ferro-Resonant transformer– which is good for voltage regulation on unstable AC input sources. The downside is the noise and extra heat. [Note: The two repeaters at the clubhouse use Ferro-Resonant PS's: Buzzzzzzzzzzzzz].

I was concerned about the heat– so a small sized 12V fan was installed along with a carry handle to make the 25 pounds easier to do business with. As long as this PS was being hacked- A West Mountain Radio Rig-Runner fuse panel with Power Pole connectors was added for power distribution to various 12 volt loads. These additions/ mods worked well at my station.

Back to the Salmon Run voltage loss issue: The cover on the PR-30 was removed and found the nuts that secure the 1/4 inch 13.8V output studs were loose… and there was some broken insulating washer parts in the bottom of the enclosure. It looked like these washers had deteriorated from the internal heat and whoever worked on this supply last simply left them out. This resulted in the NEG output stud being tightened into the chassis (GND) and the circuit board with the electronics is being stresses because it is bent. The output stud nuts were tightened up and the PS reassembled.

Testing for voltage loss revealed .1 to .2

volts difference– which is quite small and acceptable.



The RigRunner DC Power Distribution panel worked out well for my ham station situation.

I've decided that my old PR-30 is on it's last leg and I want a reliable replacement. Let's go shopping.

There's two kinds of hams: Digital and Phone; two kinds of ham radios: SDRs or conventional superhets; two kinds of Ham Radio Power Supplies. Linear or SMPS. Which kind works best for you or me?

The Linear Power Supply- the old reliable standby. Most hams swear by them. "They'll never let you down", I've heard some club members attest. They are called 'Linear' because the output regulator transistors operate in the 'linear' portion of their output curve like the low distortion Class A amplifier. Yes, they have a good reputation of reliability- but in reality- they are big, heavy and inefficient. The Linear PS regulator is in effect a variable resistor in *series* with the supply's voltage source to maintain 13.8 volts output no matter what the load current is. There is a lot of heat wasted across this 'series' resistor/ regulator. The Linear PS design calls for large transformers and heat-sinks which makes the unit big and heavy. Noted efficiency is less than 30%. [Note: I have measured the power consumption with my PR -30 linear supply: 95 RF Watts output uses 400 Watts of 120 VAC power supply input].

The Switch Mode Power Supply (SMPS)- is the new fangled replacement. Some hams say that they generate a lot of noise that'll get into your HF radio. Modern SMPSs use transistors to switch the transformerless rectified high voltage output on and off at a high rate of speed– 100 KHz to 1 MHz. Older SMPS use a lower rate– which we sometimes can see as noise in our HF receivers. When the transistors are switched ON– there is no voltage loss across it. When OFF: Same O. No voltage drop = no heat. Components used in SMPS are specially selected for a 90 to 100% efficiency factor. Inductors that operate at higher frequencies can be smaller with hardly any heat to dissipate– which can be cooled with a small fan. This results in a much smaller device to be part of your ham station.

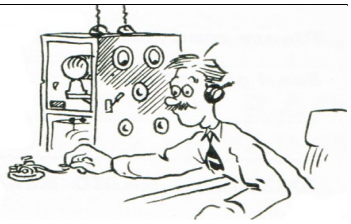
Selection Method: Perusing the Eham.net **http://www.eham.net/reviews/products/20** power supply ratings… I scanned down the column for an average rating of 4.5+ and then across to the $$ column. Usually the model number has intelligence and will reveal the output AMPS value. If not, then I'd investigate more.

Woa! What's this? Jetstream JTPS**31**MB where 28 reviewers rated it at 4.9 and it only costs $90. Everybody loves it. Hardly any complaints of HF noise. It's 5 x 6 x 3 inches in size, weighs 3 pounds. There's two models: MA with two sets of Power Poles on the rear; MB with Binding Posts to connect to. I chose the PowerPole model.

After I use this power supply at my station for a while and I deem it 'reliable' it will be integrated into the Salmon Run Expedition Civil War Field Desk station (see Shack O the Month page 3).

Expect a review of the Jetstream JTPS31MB in a future edition of the Bark.

96 YEARS AGO IN HAM RADIO



Dateline: 1919…
Bad news at the ARRL– 80 percent of the nations hams were still overseas in the Great War (WW1).

QST magazine is $4700 in the RED
($65,000 in 2016 dollars)
There's $33 in the ARRL Treasury.
($459 in 2016 dollars)

Hiram P Maxim— The Old Man (aka TOM)— and other board members dug into their own pockets to fund a "Blue Card Appeal" to all known ham operators and/or their families asking them to write their congressman to defeat the bills that would allow the Navy control of Radio Frequencies.

Overwhelmed by the grassroots opposition of Naval control of the radio spectrum… Congress killed the bills in Committee.

TOM and the ARRL Board issued $7500 worth of bonds to members to get QST published again. Also, pressure was put on Washington to remove the WW1 radio ban and let hams back on the air.

April 1919: The Navy removed the ban on receiving. Filaments were lit and the sounds of government stations came through headphones country wide. Hams wanted more.

June 1919: The first Post-War QST is published. The Cash came from a loan from the printer. The pages will filled with discussions and ideas describing the New Thing– Vacuum Tubes.

November 1919: Congress demanded that the Sec. of Navy remove amateur radio transmitting restrictions. Success was met.

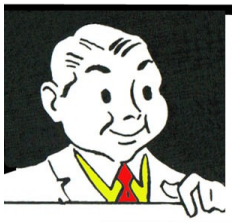
1920: Amateur use of Vacuum Tube CW transmitters are getting underway. Also amateurs who are accustomed to using 1KW spark transmitters could not bring themselves to employ vacuum tube powers of only a few watts.

May 1920: Amateur station 8XK operated by Dr Frank Conrad, a Westinghouse employee– joined many other hams in the transmission of music, news, sports, lectures and advertisements. This was LEGAL to do per the Radio Act of 1912 which only restricted the power level to 1KW and to the 200 Meter wavelength. (1500 on your AM dial)

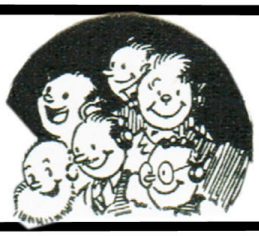
Sept 1920: Retail outlets began selling a Westinghouse "basic broadcast receiver" for $10.

Nov 2, 1920: Warren G Harding was elected president. The results were wired to amateur radio station 8XK and read over the air in the Pittsburg area. This broadcast was promoted by Westinghouse as the first broadcast to the general public.

From the W7OS Museum collection: 1920 Westinghouse Broadcast Receiver. It has a 'Tickler' adjustment which makes it a Regenerative type receiver. The left side is the Tuner and the right side is the Detector and audio amplifier. It's Neat-O



The Logger's Bark
Photo Page



More images from the RCT Ham Radio booth at the WA State Fair's Hobby Hall.

Ferry County Pine Cone.

95 watts and three wires

Greetings, Old Goat... U know who U are

RADIO CLUB OF TACOMA

1916 - 2016

100 YEARS OF SERVICE

THE LOGGER'S BARK is the *OFFICIAL PUBLICATION OF THE RADIO CLUB OF TACOMA*… and is published by RCT, PO Box 11188, Tacoma, WA 98411. The Radio Club of Tacoma is a non-profit corporation as defined by law, and all proceeds will be used exclusively for charitable and educational purposes. The Radio Club of Tacoma's Club House is located at 1249 Washington St, Tacoma, WA 98411, phone: 253-759-2040.

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MEMBERSHIP INFO: FULL (licensed) and ASSOCIATE (non licensed) is $35 per calendar year. $30 for Licensed Seniors (65 and over). Licensed family members at same address pay $20 each for the first two and are free for the third, fourth, and so on. Full-time students, licensed or non licensed, up to age 25 are $20 per year. Note: fees are applicable for the calendar year: Jan to Dec. Lifetime membership is 20 times the yearly fee you are eligible for.. Lifetime memberships are calculated based on the FULL and ASSOCIATE rates.

RADIO CLUB REPEATERS

Central Tacoma:	147.280 + PL=103.5	
Crawford Mountain	147.380 + PL=103.5	(E of Olympia @ 1800 ft ASL)
Central Tacoma:	440.625 + PL=103.5	
North Tacoma:	145.21 – PL=141.3	

www.w7dk.org [LINK] - For the latest and most current information on events and activities, visit the Radio Club of Tacoma Website.